



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,606	12/08/2003	Yuko Takeda	60395 (49381)	4761
21874	7590	09/22/2008		
EDWARDS ANGELL PALMER & DODGE LLP			EXAMINER	
P.O. BOX 55874			TRAORE, FATOUMATA	
BOSTON, MA 02205				
		ART UNIT	PAPER NUMBER	
		2136		
		MAIL DATE	DELIVERY MODE	
		09/22/2008	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/731,606

Applicant(s)

TAKEDA ET AL.

Examiner

FATOUMATA TRAORE

Art Unit

2136

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06/27/2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This is in response to the petition to withdraw holding of abandonment under 37 CFR 1.181. Claims 1-20 are pending and have been considered below.

Response to Arguments

2. Applicant's arguments filed April 25, 2008 have been fully considered but they are not persuasive.

Applicant argued that "Imai fails to teach or suggest a sheet, on which the encrypted image is formed, having one or a plurality of memories in which the encryption key is written. Thus, Imai fails to teach or suggest, for example, at least the following elements of claim 1:

- i. an image forming apparatus including an acquisition unit for acquiring an image signal, and an image forming unit for forming an image based on the image signal acquired by said acquisition unit on a sheet having one or a plurality of memories;
- ii. a writing unit for writing the encryption key into the memory on said sheet having one or a plurality of memories; and
- iii. said image forming unit forms an image based on the image signal encrypted by said encrypting unit on said sheet having one or a plurality of memories"

The examiner submits as disclosed by the previous office action, the examiner relied on Monroe et al to disclose such feature see (column 1, lines 50-60.; column 2, lines 25-35; column 4, lines 32-40).

Regarding Imai failing to disclose:

an image forming apparatus including an acquisition unit for acquiring an image signal, and an image forming unit for forming an image based on the image signal acquired by said acquisition unit on a sheet having one or a plurality of memories

The examiner respectfully disagrees and submits that Monroe et al discloses: an image forming apparatus including an acquisition unit for acquiring an image signal(*the step of acquiring personal video information for a user of an identification card*) (see column 1, lines 50-60; column 2, lines 25-33), and an image forming unit for forming an image based on the image signal acquired by said acquisition unit on a sheet having one or a plurality of memories(*column 2, lines 25-33; Fig .2 , item 36*);

Regarding Imai failing to disclose:

- ii. a writing unit for writing the encryption key into the memory on said sheet having one or a plurality of memories; and
- iii. said image forming unit forms an image based on the image signal encrypted by said encrypting unit on said sheet having one or a plurality of memories"

The examiner respectfully disagrees and submits that Monroe et al discloses:

- ii. a writing unit for writing the encryption key into the memory on said sheet having one or a plurality of memories(*digitizing the acquired video information for storage in card 's memory means*) (*column 1, lines 50-60*); and
- iii. said image forming unit forms an image based on the image signal encrypted by said encrypting unit on said sheet having one or a plurality of memories(*column 4, lines 59-65*)"

Applicant also argued that "Monroe fails to make up for the deficiencies of Imai. As discussed at the cited portion, Monroe discloses a "smart card," which "comprises a plate 32 including a magnetic stripe 34 for magnetically storing data and an integrated circuit," which comprises an EEPROM memory chip with a microprocessor." The card serves as "a memory storage device for storing fake-proof video information data for later retrieval."

Monroe fails to teach or suggest at least the following:

- (i) an encryption key creating unit for creating an encryption key when said acquisition unit acquires an image signal;
- (ii) an encrypting unit for encrypting the image signal with the encryption key created by said encryption key creating unit;
- (iii) a writing unit for writing the encryption key into the memory on said sheet having one or a plurality of memories; and
- (iv) said image forming unit forms an image based on the image signal encrypted by said encrypting unit on said sheet having one or a plurality of memories"

The examiner respectfully disagrees and submits that the combined teaching of Imai and Monroe et al discloses every feature of claim 1 as discussed above. Applicant also argued that "Monroe does not disclose or suggest writing an encryption key into a memory on a sheet, as described in claim 1 of the present application"

The examiner respectfully disagrees and submits that Monroe et al discloses writing an encryption key into a memory on a sheet (*column 1, lines 50-60*); Applicant argued that "Imai does not disclose or suggest "writing an encryption key into a memory on a sheet" of claim 1"

The examiner respectfully disagrees and submits that in addition of Monroe et al disclosure of such feature, Imai also discloses writing an encryption key into a memory on a sheet(see column 3, lines 22-33).

Therefore, the examiner the examiner submits that the combined teaching of Imai in view of Monroe et al discloses such feature.

Regarding claim 2, the examiner maintains the rejection based on the same rational as applied to claim 1 above, and therefore maintains the rejection.

Regarding claim 3, the examiner maintains the rejection based on the same rational as applied to claim 1 above, and therefore maintains the rejection.

Regarding claims 5-11 and 14-20, the examiner maintains the rejection based on the same rational as applied to claim 1 above, and therefore maintains the rejection.

Regarding claims 7 and 16, applicant argued "It is not seen where the cited combination discloses that the image forming unit forms the number of times (the decrypted image is formed on a sheet) in a visually inconspicuous form within a region where the image is formed, as claimed herein"

The examiner respectfully disagrees and submits that Harada et al discloses that said image forming unit forms the number in a visually inconspicuous form within a region where the image is formed((the condition storage unit shows a permitted playback number of time)(paragraph [0024], [0214]-[0240]).

Regarding claims 10 and 19, Applicant argued "Further with respect to claims 10 and 19, it is not seen where the combination of Imai, Monroe and Harrada disclose an apparatus wherein the information read by said memory reading unit includes one or a plurality of identifiers of image forming apparatus, as claimed herein. There is not even a hint of a suggestion for storing an identifier of the image forming unit in the cited prior art combination".

The examiner respectfully disagrees and submits that Harada et al discloses that the information read by said memory reading unit includes one or a plurality of identifiers of image forming apparatus(see paragraph [0025] the identifier been permitted playback number of times, permitted playback period etc..).

Regarding claims 11 and 20, Applicant argued that "Also, with respect to claims 11 and 20, it is not seen where the combination of Imai, Monroe and Harada et al disclose an apparatus wherein the memory reading unit includes a code and an input code is compared with the code in

memory to determine whether to decrypt the image signal. The Examiner refers to permissive conditions set forth in Harada for making the decrypted image, however, those conditions fail to include a code. They merely refer to permissive numbers of copies or permissive periods for making copies and the like"

The examiner respectfully disagrees and submits that Harada et al discloses such feature (see paragraphs [0306]-[0310]).

It appears that Applicant is arguing the references individually as opposed to their combination. It should be noted that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & CO.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

To the extent that the response to the applicant's arguments, may have mentioned new portions of the prior art references which were not used in the prior office action, this does not constitute new a new ground of rejection. It is clear that the prior art reference is of record and has been considered entirely by applicant. See *In re Borer*, 363 F.2d 455, 458 n.2, 150 USPQ 441, 4441 n.2 (CCPA 1966) and *In re Bush*, 296 F.2d 491, 496, 131 USPQ 263, 267 (CCPA 1961).

The mere fact that additional portions of the same reference may have been mentioned or relied upon does not constitute new ground of rejection. *In re Meinhardt*, 392, F.2d 273, 280, 157 USPQ 270, 275 (CCPA 1968).

In light of the above, the claims remain rejected and this office action made final.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imai (US 5,512,977) in view of Monroe et al (US 5,268,963).

Claim 1: Imai discloses a copying machine capable of prohibiting illegal copying of document comprising:

- i. An encryption key-creating unit for creating an encryption key when acquisition unit acquires an image signal (encryption generating means capable of generating an encryption key) (column 2, lines 15-17);
- ii. An encrypting unit for encrypting the image signal with the encryption key created by said encryption key creating unit (encryption generating means capable of generating an encryption key for enciphering the information read by information reading means) (column 2, lines 15-20);
- iii. A writing unit for writing the encryption key into memory on said sheet having one or a plurality of memories (and an information writing means writing the information enciphered on memory) (column 2, lines 20-25),

- iv. Wherein said image said image forming unit forms an image based on the image signal encrypted by said encryption unit on said sheet having one or a plurality of memories (column 2 lines 5-25).

But does not explicitly disclose a sheet having one or a plurality of memories.

However, **Monroe et al** discloses a device for encoding personalized identification for storage on memory device, which further discloses of a sheet (card) having one or a plurality of memories (column 3, lines 52-68 and figure 2). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include a sheet having one or a plurality of memories in the copying machine of **Imai**. One would have been motivated to include a memory card in order to store secure data.

Claims 2, 12: **Imai** and **Monroe et al** disclose a copying machine capable of prohibiting illegal copying of document as in claim 1 above, and further comprising:

- v. An image-reading unit for reading the image formed on said sheet having one or a plurality of memories (information reading means for reading the information from the first or fourth medium) (column 2, lines 13-15);
- vi. A memory-reading unit for reading encryption key from memory when image-reading unit reads the image (the encryption key generated

by the encryption key generating means is store in the first) (column 3, lines 20-25); and

vii. A decrypting unit for decrypting the image signal of the image read by said image reading unit, with the encryption key read by said memory reading unit (and the deciphering means deciphers the information read by the information reading means utilizing as decryption key the encryption key store in the memory) (column 3, lines 20-25),

viii. Wherein said image forming unit forms an image based on the image signal decrypted by said decrypting unit on another sheet (column 3, lines 10-25).

But does not explicitly disclose a sheet having one or a plurality of memories.

However, **Monroe et al** discloses a device for encoding personalized identification for storage on memory device, which further discloses of a sheet (card) having one or a plurality of memories (column 3, lines 52-68 and figure 2).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include a sheet having one or a plurality of memories in the copying machine of **Imai**. One would have been motivated to include a memory card in order to store secure data.

Claim 3: **Imai** and **Monroe et al** disclose a copying machine capable of prohibiting illegal copying of document as in claim 1 above, **Imai** further discloses acquiring/creating unit for acquiring or creating information about the image

encrypted with the encryption key, wherein said writing unit writes the encryption key and the information acquired or created by said information acquiring/creating unit into the same memory, or different memories (an information writing means for writing, printing, describing, storing information in to memory (column 2, lines 20-25 and lines 35-43) and Monroe et al also discloses an acquiring unit for acquiring information about the image encrypted (column 2, lines 21-44). However, Imai does not explicitly disclose a sheet having one or a plurality of memories. Monroe et al discloses a device for encoding personalized identification for storage on memory device, which further discloses of a sheet (card) having one or a plurality of memories (column 3, lines 52-68 and figure 2). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include a sheet having one or a plurality of memories in the copying machine of Imai. One would have been motivated to include a memory card in order to store secure data.

a.

Claims 4, 13: Imai and Monroe et al disclose a copying machine capable of prohibiting illegal copying of document as in claims 2 and 12 above, and further discloses that the memory reading unit reads the encryption key and information about the image encrypted with the encryption key from the same memory, or different memories when said image reading unit reads the image (encryption key generated by encryption key generating means is stored in the first memory, and the deciphering means deciphers the information read by the information

reading means) (column 3, lines 20-25), and said image forming apparatus further comprises a display unit for displaying the information read by said memory reading unit(the storage location in the memory in which the encryption key is stored is displayed on the displaying means(column3, lines 50-55). But Imai does not explicitly disclose a sheet having one or a plurality of memories. However, Monroe et al discloses a device for encoding personalized identification for storage on memory device, which further discloses a sheet (card) having one or a plurality of memories (column 3, lines 52-68 and figure 2). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include a sheet having one or a plurality of memories in the copying machine of Imai. One would have been motivated to include a memory card in order to store secure data.

5. Claims 5-11, 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imai (US 5512977) and Monroe et al (US 5268963) in view of Harada et al (US 20030007640).

b. Claims 5, 14: Imai and Monroe et disclose an apparatus capable of prohibiting illegal copying of file as in claims 4 and 13 above, and but does not explicitly disclose that the reading unit includes the number of times the image was formed. However, Harada et al discloses a similar apparatus, which includes content storage unit with pre-stores usage condition in correspondence

with the content (page 11, paragraph 0215). The usage condition is permitted a permitted number of playback times. The permitted number of playback times imposes limitation on the total number of times that the user is permitted to play back the stored content that correspond to the usage condition (page 11 paragraph 0216). The condition storage unit shows (writes) a permitted playback (image formed) number of time (page 2, paragraphs 0024, 0214-0240 and figure 13). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined method of Imai and Monroe et al such as to include the number of times a copy was made in the copying machine as taught by Harada et al. One would have been motivated to include the number of copy in order to determine when the authorized limit was reached.

Claims 6, 15: Imai, Monroe et al and Harada et al disclose an apparatus capable of prohibiting illegal copying of file as in claims 5 and 14 above, and Harada et al further discloses that the condition storage unit shows (writes) a permitted playback (image formed) number of time (page 2, paragraphs 0024, 0214-0240 and fig 13). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined method of Imai and Monroe et al such as to include the number of times a copy was made in the copying machine as taught by Harada et al. One would have been

motivated to include the number of copy in order to determine when the authorized limit was reached.

Claims: 7, 16. Imai, Monroe et al and Harada et al disclose an apparatus capable of prohibiting illegal copying of file as in claims 6 and 15 above, and Imai further discloses that the control circuit accepts input data from the keyboard and display necessary data on the display (column 10, lines 55-60).

Claims 8, 17: Imai, Monroe et al and Harada et al disclose an apparatus capable of prohibiting illegal copying of file as in claims 5 and 14 above, and Harada et al further discloses that the condition storage unit shows (writes) a permitted playback (image formed) number of time and a condition judgment unit which judges to play back the content only when the number of times of actual playback (image formed) of the content by the playback unit (image processing unit) is equal to or less than the permitted number of times (page 2, paragraphs 0024, 0214-0240, and figure 11). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined method of Imai and Monroe et such as to include the number of times a copy was made in the copying machine as taught by Harada et al. One would have been motivated to include the number of copy in order to determine when the authorized limit was reached.

Claims 9, 18: Imai and Monroe et al disclose an apparatus capable of prohibiting illegal copying of file as in claims 4 and 13 above, while neither of them explicitly discloses that the reading unit includes a period. However Harada et al discloses a similar apparatus in which the condition storage unit shows a permitted playback (image formed) period and a condition judgment unit which judges to determine if the date and time at which the content is to be played back by the playback unit is within the permitted playback period and then (page 2, paragraphs 24, 243-250 and figure 12). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined method of Imai and Monroe et such as to include a predetermined time frame in the copying machine as taught by Harada et al. One would have been motivated to define a time period in order to prevent unauthorized copy when the limit was reached.

Claims 10,19: Imai, and Monroe et al disclose an apparatus capable of prohibiting illegal copying of file as in claims 4 and 13 above, while neither of them explicitly discloses that the identifier read by the memory reading unit include the identifier stored in the storing unit. However Harada et al discloses a similar apparatus in which the record/playback (image processing) device includes a condition storage unit operable to store usage condition information (identifiers) showing a permissive condition for use of the content; and a condition judgment unit operable to judge whether use of the content is permitted

according to the usage condition information (page 1, paragraph 0012).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined method of Imai and Monroe et al such as to include an identifier in the copying machine as taught by Harada et al. One would have been motivated to include the identifier in order to prevent illegal copying.

Claims 11, 20: Imai and Monroe et al disclose an apparatus capable of prohibiting illegal copying of file as in claims 4 and 13 above, while neither of them explicitly discloses that the code inputted by the input unit and the code read by the reading unit are identical. However Harada et al discloses a similar apparatus which further discloses the record/playback (image processing) device includes a condition storage unit operable to store usage condition information (identifiers) showing a permissive condition for use of the content; and a condition judgment unit operable to judge whether use of the content is permitted according to the usage condition information (page 1, paragraph 0012). In case of receiving the read instruction from the input unit as well the information indicating of successful authentication from the authentication unit, the control unit outputs a storage instruction to the title key-generating unit of the decryption unit (page 15, paragraph 0309). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined method of Imai and Monroe et al such as to include a code in the

copying machine as taught by Harada et al. One would have been motivated to include the code in order to prevent illegal copying.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

1. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fatoumata Traore whose telephone number is (571) 270-1685. The examiner can normally be reached Monday through Thursday from 7:00 a.m. to 4:00 p.m. and every other Friday from 7:30 a.m. to 3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nassar G. Moazzami, can be reached on (571) 272 4195. The fax phone number for Formal or Official faxes to Technology Center 2100 is (571) 273-8300. Draft

Art Unit: 2136

or Informal faxes, which will not be entered in the application, may be submitted directly to the examiner at (571) 270-2685.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group Receptionist whose telephone number is (571) 272-2100.

Tuesday, May 27, 2008

/Nasser G Moazzami/

Supervisory Patent Examiner, Art Unit 2136